

Alternator Regulators

MOTOROLA SOLID STATE

Jeep

DESCRIPTION

Voltage regulator is a solid state unit. Unit is sealed at the factory and no adjustments are required. If unit does not test to specifications and operation is unsatisfactory, unit must be replaced. Solid State regulators are identified by part number 8RH2003.

TESTING

VOLTAGE REGULATOR OUTPUT

Connect voltmeter to battery, negative to negative and positive to positive. Turn head lights on low beam. Start engine and operate for several minutes to bring regulator up to operating temperature. Set engine at 1000 RPM and note voltage. Reading should be within specifications for temperature of regulator. If not within specifications, replace regulator.

Specification

Ambient Temperature

Voltage Reading

0-50°F	14.2-15.3
50-100°F	13.7-14.8
100-150°F	13.1-14.3
150-200°F	12.7-13.8

OVERCHARGE CONDITION

An overcharge condition is due to excessive voltage applied to alternator field. Excessive voltage may be caused by poor regulator ground, a defective battery or voltage regulator. Check regulator ground by connecting a jumper wire from regulator case to battery negative terminal. If voltage drops, repair regulator ground. Check black wire connection of regulator to black wire of engine compartment harness.